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EXAMINER
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MURALIDAR, RICHARD V

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* KARL-RAGMAR RIEMSCHEIDER

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Appeal 2008-4731  
Application 10/535,161  
Technology Center 2800

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Decided: October 30, 2008

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Before KENNETH W. HAIRSTON, JOHN A. JEFFERY,  
and THOMAS S. HAHN, *Administrative Patent Judges*.

HAHN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-19. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

## STATEMENT OF THE CASE

Appellant invented an improved system and method for measuring and managing battery cell parameters. To this end, a cell unit is provided for measuring battery parameters, and the measured parameters are transmitted by wireless communication to a control unit (alternatively labeled “central unit”). Control signals are sent by wireless communication from the control unit to the cell unit.<sup>1</sup> Claim 11 is illustrative:

11. Control unit for receiving measured values of physical parameters of battery cells, the control unit comprising

a control unit transmitter for transmitting control signals to a cell unit;

wherein the measured values are received via a first wireless communication link; and

wherein the control signals are transmitted via a second wireless communication link.

The Examiner relies on the following prior art references to show unpatentability:

Potega	US 6,459,175 B1	Oct. 1, 2002
Imai	US 6,583,602 B2	Jun. 24, 2003 (filed May 1, 2002)
Osborne <sup>2</sup>	US 2004/0164706 A1	Aug. 26, 2004 (PCT filed Mar. 28, 2002)

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<sup>1</sup> See generally Spec. 10:13-11:12.

<sup>2</sup> US Patent 7,400,113 B2 issued from this published application on July 15, 2008.

1. Claim 8 stands rejected under 35 U.S.C. § 102(e) as anticipated by Potega.<sup>3</sup>
2. Claims 9 and 10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Potega and Osborne.
3. Claims 1-3, 5-7, and 11-19 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Osborne and Potega.<sup>4</sup>
4. Claims 1-5, 14, and 17 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Imai and Potega.

Rather than repeat the arguments of Appellant or of the Examiner, we refer to the Brief and the Answer<sup>5</sup> for their respective details. In this decision, we have considered only those arguments actually made by Appellant. Arguments that Appellant could have made but did not make in the Brief have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

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<sup>3</sup> The Examiner rejected claim 8 under § 102(e). However, Potega is actually a § 102(b) reference because it was published more than a year before the effective filing date of the present application. This error is deemed harmless since it does not affect our decision regarding the merits of the anticipation rejection.

<sup>4</sup> Although the Examiner's statement of the rejection does not include claims 6 and 7 (Ans. 9), the body of the rejection nevertheless includes claims 6 and 7 (Ans. 11). We therefore presume that the Examiner's omission of claims 6 and 7 in the statement of the rejection was a typographical error, and claims 6 and 7 were intended to be included in this rejection.

<sup>5</sup> Appellant did not file a Reply Brief. We, therefore, refer to (1) the Appeal Brief filed October 11, 2007, and (2) the Answer mailed January 22, 2008 throughout this opinion.

*Arguments Opposing Anticipation and Obviousness Rejections*

The substance of Appellant's argument opposing the anticipation rejection is that Potega lacks "the specific teaching of measuring physical parameters of the battery cell and transmitting the measured values of the physical parameters (e.g., to a control unit) via a wireless communication link as claimed" (Br. 7).

Appellant then premises all arguments opposing the obviousness rejections on the recitation in every rejected claim of a limitation regarding wireless communication of measured battery cell parameters or control signals. Consequently, Appellant argues the obviousness rejections are improper because Potega is deficient and is not cured by the other relied-on references (Br. 8-10).

ISSUES

The anticipation issue turns on whether Potega expressly or inherently discloses (1) measurement of battery physical parameters, and (2) wireless communication of measured battery parameters.

The obviousness issue before us is whether Appellant has shown that the Examiner erred in finding that the collective teachings of Potega and Osborne or Imai teach or suggest the claimed limitations. This issue turns on whether a skilled artisan would have construed Potega to teach or suggest measurement of battery parameters and wireless communication of measured parameters.

## FINDINGS OF FACT

The following Findings of Fact (FF) are supported by a preponderance of the evidence on the record before us:

1. Potega discloses a power supply device that is used in conjunction with a battery operated device and its corresponding battery (Potega, col. 12, ll. 52-55; Fig. 10 (reproduced *infra* at p. 10)).
2. Potega discloses a battery device that is equipped with a battery and also is “sensor-equipped ... [with] a thermistor array, voltage and current monitoring capabilities 48” (Potega, col. 49, ll. 37-40; Fig. 10 (reproduced *infra* at p. 10)).
3. Three data lines 44, 45, and 47 are connected to the Potega sensors 48 that measure physical parameters of battery cells (Potega, col. 58, ll. 20-31; Fig. 10 (reproduced *infra* at p. 10)).
4. Potega discloses that the first prototype for the system shown in Figure 10 employed infrared wireless communications for transmitting signals from the three data lines connected to the sensors used to measure battery parameters (Potega, col. 49, ll. 37-40; col. 58, ll. 20-31; col. 71, l. 61 to col. 72, l. 2; Fig. 10 (reproduced *infra* at p. 10)).

## PRINCIPLES OF LAW

### *Anticipation*

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil Co. of Calif.*, 814 F.2d

628, 631 (Fed. Cir. 1987). The inquiry as to whether a reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772 (Fed. Cir. 1983), it is only necessary for the claims to "'read on' something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it."

### *Obviousness*

Obviousness is a question of law premised from underlying factual determinations. Therefore, to support a legal conclusion of obviousness in rejecting claims under 35 U.S.C. §103, the Examiner is required to establish factual bases. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). The required factual determinations are set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). This continues to be the required analysis under § 103 *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727, 1734 (2007).

The scope and content of prior art relevant to an obviousness determination includes not only art that is the same as the art of the invention, but also those arts logically related to the inventor's concern. *In re GPAC, Inc.*, 57 F.3d 1573, 1577-79 (Fed. Cir. 1995). Addressing what is acceptable combinations of elements from prior art, the U.S. Supreme Court explains:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique

has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida* [v. *AG Pro, Inc.*, 425 U.S. 273 (1976)] and *Anderson-Black Rock[, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969)] are illustrative – a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions. *KSR*, 127 S. Ct. at 1740.

The operative question in this “functional approach” is thus “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *Id.*

In cases under § 103 there is a production of evidence burden that begins with the Examiner, and a shift in this burden is triggered when the Examiner establishes a prima facie obviousness case. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). The burden shifted to the Appellant is to rebut the Examiner’s prima facie case with opposing evidence and/or arguments. *Id.*

## ANALYSIS

### *Anticipation*

Appellant, in arguing that independent claim 8 is not anticipated, acknowledges that “measuring physical parameters of the battery cell and transmitting the measured values of the physical parameters (e.g., to a control unit) via a wireless communication link as claimed ... would appear to be the one teaching singularly absent from Potega” (Br. 7). The Examiner, in contradiction, finds “Potega clearly teaches ... that a battery



parameter(s) is measured, and ... the measured battery parameter(s) is transmitted over a wireless link” (Ans. 22 (emphasis omitted)).

Appellant contends this subject matter is absent from Potega because Appellant “has not found [it] within the voluminous disclosure of Potega, despite diligent search” (Br. 7). In conjunction with arguing this contention, Appellant references and quotes part of a Potega disclosure:

Another illustrative passage is the paragraph bridging columns 71 and 72 of Potega, which states: "The IR communications link in the prototype was used for data acquisition (for example, polling the supplied device for information on its power configuration, the presence of a battery, etc.) ....”

Again, no mention [is] made of anything that can be construed as "measured values of physical parameters of the battery cells" as claimed. ... (Br. 8)

This Appellant cited Potega disclosure and the associated argument is not addressed in the Answer.

Potega discloses a power supply device that is used in conjunction with a battery operated device and its corresponding battery (FF 1). In this context, the Examiner finds that Potega discloses a battery device 43 (*see* Potega, Fig. 10 reproduced *infra* at p. 10) that includes a battery and a “cell unit ... for measuring physical parameters of battery cells...” (Ans. 7). We concur with the Examiner that the Potega disclosed battery device 43 includes a battery 53 and sensors 48 for measuring battery parameters (FF 2). Further, Potega discloses that the measured parameter information is accessible from three provided data lines that are connected to sensors 48 (FF 3). Accordingly, we are not persuaded by Appellant’s arguments, and

concur with the Examiner that Potega discloses a cell unit that measures physical parameters of battery cells.

We further are not persuaded by Appellant that Potega fails to teach or suggest wireless communication of measured physical parameters of battery cells. Appellant quotes only the third sentence from the paragraph bridging columns 71 and 72 of Potega, as reproduced *supra* (Br. 8). In context, the first three sentences of the Potega cited paragraph read:

Infrared wireless data communications were used in the first prototype of power supply 26. The IrDA standard protocols (V.1.0) were used, and power supply 26 had an IR port where FIG. 10 shows the optional connector block (79) but for only the three data lines, as power delivery was via wire. The IR communications link in the prototype was used for data acquisition (for example, polling the supplied device for information on its power configuration, the presence of a battery, etc.) ... (Potega, col. 71, l. 61, to col. 72, l. 2)

Thus, Potega teaches wireless communication for signals from “the three data lines” that are the data lines 44, 45 and 47 connected to sensors 48 shown in Figure 10 for measuring battery parameters (FF 3). Figure 10 is reproduced below:

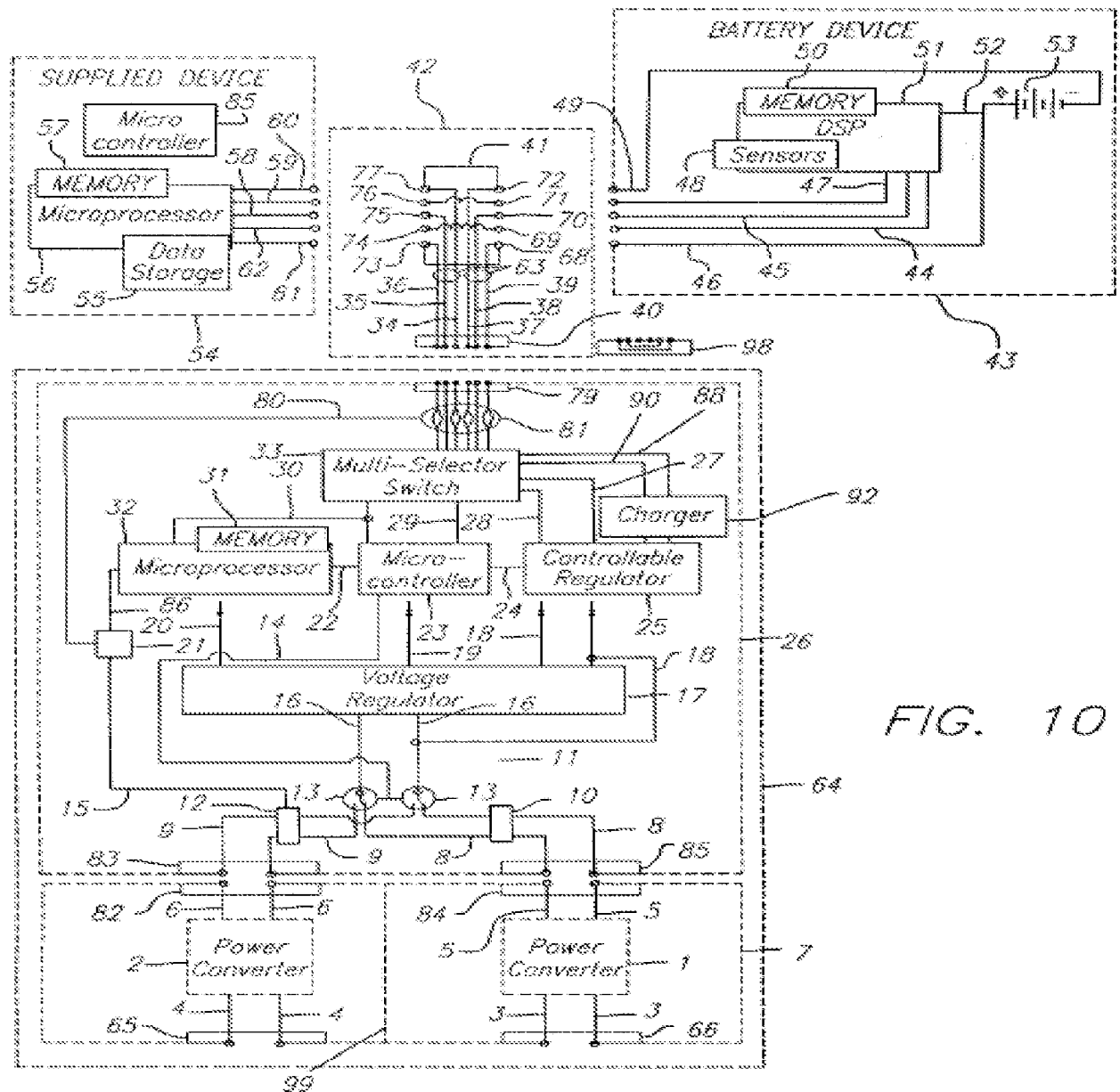


FIG. 10

Figure 10 depicts a block diagram of a Potega battery device 43, power supply 26, and supplied device 54.

Based on these teachings, we disagree with Appellant's contention that Potega is deficient. Potega teaches that the first prototype for the system shown in Figure 10 employed infrared wireless communications for

transmitting signals from the three data lines connected to sensors used to measure battery parameters (FF 4). We concur with the Examiner that the limitation in claim 8 calling for a “transmitter for a transmission of the measured values of ... battery cells via a wireless communication link” reads on the infrared communications link in Potega. Accordingly, we will sustain the Examiner’s rejection of claim 8.

*Obviousness Rejection Over Potega and Osborne*

*Claims 9 and 10*

Claims 9 and 10 depend from independent claim 8, and Appellant’s sole argument is that the previously asserted failure of Potega to teach wireless communication of measured battery parameters is not cured by Osborne (Br. 8-9). Relying on this argument, Appellant asserts that the rejected claims depend from “an allowable base claim” and also are allowable (*Id.*). We are unpersuaded by these arguments, however, for the reasons previously discussed in connection with claim 8. Accordingly, we will sustain the Examiner’s rejection of claims 9 and 10.

*Obviousness Rejection Over Osborne and Potega*

*Claims 1-3, 5-7 and 11-19*<sup>6</sup>

Appellant, again, asserts the same sole argument noted above and adds that rejected claims 1, 11, and 14 are independent and the other rejected claims are respectively dependent from them (Br. 9). Specifically, Appellant sets out that each of the three rejected independent claims recites a “wireless communication link” for measured battery parameters, and that

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<sup>6</sup> See n.3, *supra*, concerning our consideration of this rejection with respect to claims 6 and 7.

“Potega does not contain any such teaching” (*Id.*). In conclusion, Appellant argues “claims [2, 3, 5, 12, 13 and 15-19] are also patently distinguishable and allowable over [Potega and Osborne] by virtue of their dependency upon an allowable base claims [1, 11, and 14]” (*Id.*).

For the reasons previously indicated, we are not persuaded by Appellant that Potega fails to teach wireless communications of measured battery parameters. Therefore, we will sustain the Examiner’s rejection of claims 1-3, 5, and 11-19.

The Examiner sets out grounds and reasons with citations to Osborne in rejecting claims 6 and 7 (Ans. 11-12). Appellant is silent concerning the rejection, and, therefore failed to particularly point out any error in the Examiner’s stated reasoning in establishing a prima facie case of obviousness. Since the Examiner’s prima facie case is un rebutted, we will sustain the Examiner’s rejection of claims 6 and 7.

*Obviousness Rejection Over Imai and Potega*

*Claims 1-5, 14, and 17*

Appellant continues with the same sole argument opposing obviousness rejection. Referencing the recited limitation in rejected independent claim 1 for wireless transmission of measured battery parameters, Appellant argues that neither Imai nor Potega “contain any such teaching” (Br. 10). Based on this contention, Appellant argues claims 2-5 are “allowable over the cited references by virtue of their dependency upon an allowable base claim [1]” (*Id.*).

For the reasons previously indicated, we are not persuaded by Appellant that Potega fails to teach wireless communications of measured

battery parameters. Therefore, we will sustain the Examiner's rejection of claims 1-5.

In the Answer, the Examiner sets out grounds and reasons with citations to Imai in rejecting claim 14 (Ans. 9). While the Examiner is silent regarding the basis for rejecting dependent claim 17, we presume that the Examiner rejected this claim on the same basis as that indicated with respect to claim 14. In any event, Appellant is silent concerning the rejection, and, therefore, Appellant has failed to particularly point out any error in the Examiner's stated reasoning in establishing a prima facie of obviousness, which reasoning shifted the burden to Appellant to rebut with opposing evidence and/or arguments. *See Oetiker*, 977F.2d at 1445. Since Appellant has not rebutted the Examiner's prima facie case of obviousness for claims 14 and 17, we will also sustain the Examiner's rejection of those claims.

#### CONCLUSIONS OF LAW

Appellant has not shown that the Examiner erred in finding that Potega anticipates claim 8 under § 102. Also, Appellant has not shown that the Examiner erred in rejecting claims 1-7 and 9-19 under § 103 based on the collective teachings of the cited prior art.

#### DECISION

We have sustained the Examiner's rejections with respect to all claims on appeal. Therefore, the Examiner's decision rejecting claims 1-19 is affirmed.

Appeal 2008-4731  
Application 10/535,161

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

KIS

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